

PROCEEDINGS
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A NEW SPECIES OF *ELEUTHERODACTYLUS*
(AMPHIBIA: LEPTODACTYLIDAE) FROM THE
SIERRA DE BAORUCO, REPÚBLICA DOMINICANA

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Among novelties collected by David C. Leber and Richard Thomas during the summer of 1964 in the Sierra de Baoruco in the República Dominicana is a unique *Eleutherodactylus*. Although frogs of this genus were collected in the Baoruco by W. G. Hassler in late 1929 and early 1930 with the subsequent description of two new forms (*armstrongi*, *rufifemoralis*), (Noble and Hassler, 1933) the recent collection not only of the present novelty but of another large species, allied to *E. ruthae*, indicates that the amphibian fauna of the Baoruco is still rather sketchily known. This is due in part to the relative inaccessibility of much of the range except for the Valle de Polo region, which unfortunately does not lie at really high elevations. As more collecting is done in the higher portions of this range above 4000 feet, it is likely that there will not only be additional new species discovered but also that various of the Massif de la Selle amphibians will be encountered in the Sierra de Baoruco.

I wish to thank Messrs. Thomas and Leber for their endeavors on my behalf in this region, and Mr. Leber as well for making the illustration for the present paper. Mr. Charles M. Bogert and Miss Margaret Bullitt generously supplied me with specimens of *E. rufifemoralis* for comparative purposes. The new frog may be known as

***Eleutherodactylus neodreptus*, new species**

Type: MCZ 43207, a gravid female, from 24 km SW Barahona, Barahona Province, República Dominicana, 3700 feet, taken 6 July 1964 by David C. Leber. Original number V2867.

Diagnosis: A small, stocky species of *Eleutherodactylus* with a gran-



FIG. 1. *Eleutherodactylus neodreptus*, MCZ 43207, type, snout-vent length 20.2 mm; 24 km SW Barahona, Barahona Province, República Dominicana, 3700 feet.

ular venter, small digital discs, short hind limbs, patch-like vomerine series, unspotted venter, single femoral and crural bars, a distinctive dorsal pattern, and without inguinal glands.

Description of type: A gravid female with the following measurements (in millimeters) and ratio: snout-vent length, 20.2; distance from snout to posterior border of tympanum, 7.0; head width, 6.8; longitudinal diameter of tympanum, 1.1; longitudinal diameter of eye, 2.4; naris to eye, 2.2; femur, 8.2; tibia, 8.0; fourth toe, 7.2; tibia/snout-vent ratio, 39.6. Head length and width approximately equal; snout rather pointed and slightly truncate, with nares inconspicuous at anterior end of canthus rostralis; diameter of eye slightly more than distance from naris to anterior corner of eye; diameter of tympanum much less than diameter of eye, distance from tympanum to eye almost equal to diameter of tympanum. Interorbital distance 2.7 mm, greater than diameter of eye. Digital discs present, small, those on digits 2, 3 and 4 equal to two-thirds area of the small tympanum. Fingers short, unwebbed, 3-4-2-1 in order of decreasing length; subarticular tubercles pale gray, conspicuous. Toes short and rather stout, unwebbed, 4-3-5-2-1 in order of decreasing length; subarticular tubercles gray, well developed. Heels barely touch when femora are held at right angles to body axis. Inguinal glands absent. Dorsum smooth with low tubercles along the sides which grade gradually into the granular venter. Throat and chest smooth,

belly coarsely granular. Dorsal surface of fore- and hindlimbs smooth to very slightly tuberculate. Posterior and ventral faces of thighs covered with large, conspicuous, juxtaposed flattened granules. Tongue small, free and not notched behind, its greatest width equal to about one-half of that of floor of mouth. Vomerine teeth in two small, almost diagonal, patch-like series, enclosed well within the median margins of the choanae, separated from them by a distance equal to the length of one tooth row, the two rows separated medially by a distance equal to one and one-half tooth rows.

Coloration of type: The dorsal coloration consists of varying intensities of brown and tan in an elaborate and complex pattern (see Figure 1), as follows. General dorsal coloration dark brown with a pair of short tan reversed parentheses, with irregular edges along the anterior borders, and extending onto the scapular region, enclosing between themselves a slightly asymmetrical small tan longitudinal blotch which is appressed to and almost joined with the right parenthesis. A pale tan preocular bar involving the anterior third of the upper eyelids, followed by a dark interocular bar which becomes paler posteriorly and has its pale posterior border edged with very dark brown, thus setting the entire interocular complex off from the balance of the dorsum and leaving a vaguely double triangular figure enclosed between the parentheses and their concomitant median blotch and the pale posterior edge of the dark interocular bar. Snout brown, slightly darker than the preocular bar. Posterior dorsum dark brown, irregularly and inconspicuously marked with paler. Hindlimbs brown with a single darker brown femoral and crural transverse bar, poorly outlined in tan, and a vague indication of a transverse dark bar on the pes. Pale forelimbs with a single dark brown bar on the antebrachium. Concealed surfaces of the thighs dark brown. A dark brown canthal line which crosses the eye and extends rather far posteriorly to above the forelimb insertion. Ventral surfaces creamy with brown stippling concentrated on the throat and hindlimbs, but present as well over the entire belly; the ventral stippling does not form any pattern.

Comparisons: At the type locality of *E. neodreptus* have been taken the species *rufifemoralis* Noble and Hassler, *armstrongi* Noble and Hassler, *abbotti* Cochran, *inoptatus* Barbour, and *heminota* Shreve and Williams (the latter is the first record of this more western species in the República Dominicana). From the smaller four species (*rufifemoralis*, *armstrongi*, *abbotti*, *heminota*) *neodreptus* can be distinguished by smaller discs, both actually and relatively (*armstrongi* and *heminota* both have large discs), from all four species by stockier habitus, from *rufifemoralis* by larger size and absence of dark brown ventral pattern (see Cochran, 1941, Fig. 16, p. 53). Compared with the very large *inoptatus* (snout-vent length to 88 mm), *neodreptus* is much smaller. From all the above species, *neodreptus* differs strikingly in pattern. Although the two species are not closely allied, a detailed comparison with *rufifemor-*

alis may be the most pertinent. Six adult females of *rufifemoralis* show the following measurements (means and extremes): snout-vent length, 16.9 (15.3-17.7); head length, 6.3 (5.8-7.0); head width, 6.1 (5.9-6.5); tympanum, 1.3 (1.2-1.4); eye, 2.2 (2.0-2.4); naris to eye, 1.5 (1.3-2.0); femur, 7.9 (7.3-8.5); tibia, 8.0 (7.7-8.4); fourth toe, 7.6 (7.4-8.0); tibia/snout-vent length ratio, 47.5 (45.2-50.3). From these data it can be determined that *neodreptus* is slightly larger than female *rufifemoralis*, has a smaller tympanum, longer snout, and shorter fourth toe. The tibia/snout-vent ratio of *neodreptus* (39.6) is lower than similar ratios for female *rufifemoralis*. Additionally, the new species lacks the ventral pattern and red concealed surface coloration of *rufifemoralis*; the latter species likewise has a smooth venter and highly tubercular hindlimbs, and two dark crural crossbars—all features which *neodreptus* lacks.

The affinities of *neodreptus* are extremely uncertain. The combination of characters such as granular venter, digital discs, and short vomerine series would seem to ally it to the *auriculatus* assemblage. However, the habitus of the animal is quite different from all other members of this group in the West Indies. In build it much more resembles the upland members of the *dimidiatus* group in Hispaniola (*jugans*, *ventrilineatus*, *parabates*), but differs from them in slimmer and more pointed head. From the widespread and conglomerate *ricordi* group, which includes the majority of West Indian *Eleutherodactylus*, *neodreptus* differs in having a granular belly (although some *ricordi* members do have a granular belly, *i.e.*, *gundlachi* and *linikowskii*), well-developed discs on all four fingers (usually *ricordi* members have the discs on fingers 3 and 4 larger and better developed than those of fingers 1 and 2), short and patch-like, rather than long, vomerine series (although this is an extremely variable character throughout the group), and a smooth rather than rugose dorsum. For the moment, pending acquisition of additional material, the affiliations of *E. neodreptus* must be held in abeyance.

LITERATURE CITED

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